

**ABSTRACT OF THE DISCLOSURE**

[1047] The capacitances of one or more inputs/outputs of a circuit are estimated by using an extraction tool (120) to extract information associated with the inputs/outputs from a netlist. The information includes information associated with circuit devices directly connected to the inputs/outputs, particularly information related to device connectivity and the feature sizes of the device. Once the information is extracted, a capacitance determination element (130) aggregates the feature sizes of all the circuit devices connected to each respective input or output, to obtain aggregate feature sizes for each respective input/output. The aggregate feature size is used in determining the total capacitance of the input/output. The total capacitance thus determined can be provided to a timing analysis tool (140), which uses the total capacitance of each input or output to generate a timing model for the circuit.